

Modified Form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Application Number	10/533,839
	Filing Date	March 14, 2006
	First Named Inventor	Kaelin
	Group Art Unit	1633
	Examiner Name	Kevin Kai Hill
	Attorney Docket Number	20363-013 NATL

U.S. PATENT DOCUMENTS							
Exam Initials	Cite No.	U.S. Patent Document No.	Issue Date	Name of Patentee(s) or Applicant(s)	Class	Sub Class	Filing Date If Appropriate
	*A1	4,736,866	04/12/88	Leder et al.	800	1	
	*A2	4,873,191	10/10/89	Wagner et al.	435	172.3	
	*A3	5,166,320	11/24/92	Wu et al.	530	395	
	*A4	5,175,383	12/29/92	Leder et al.	800	2	
	*A5	5,175,384	12/29/92	Krimpenfort et al.	800	2	
	*A6	5,221,778	06/22/93	Byrne et al.	800	2	
	*A7	5,223,409	06/29/93	Ladner et al.	435	69.7	
	*A8	5,288,846	02/22/94	Quertermous et al.	435	172.3	
	*A9	5,298,422	03/29/94	Schwartz et al.	435	320.1	
	*A10	5,347,075	09/13/94	Sorge	800	2	
	*A11	5,387,742	02/07/95	Cordell	800	2	
	*A12	5,464,764	11/07/95	Capecci et al.	435	172.3	
	*A13	5,487,992	01/30/96	Capecci et al.	435	172.3	
	*A14	5,614,396	03/25/97	Bradley et al.	435	172.3	
	*A15	5,650,135	07/22/97	Contag et al.	724	9.1	
	*A16	5,683,888	11/04/97	Campbell	435	9	
	*A17	5,958,713	09/28/99	Thastrup et al.	435	7.4	
	*A18	6,548,740 B1	04/15/03	Bremel et al.	800	23	

U.S. PUBLISHED APPLICATION DOCUMENTS							
Exam Initials	Cite No.	U.S. Published Application No.	Published Date	Name of Patentee(s) or Applicant(s)	Class	Sub Class	Filing Date If Appropriate
	*A19	2002/0053062 A1	05/02/02	Readhead et al.	800	14	

FOREIGN PATENT DOCUMENTS							
Exam Initials	Cite No.	Foreign Patent Document Office Number	Name of Patentee(s) or Applicant(s)	Date of Publication	Translation Yes No		
	B1	EP 1 239 038 A1	GALAPAGOS GENOMICS B.V.	09/11/02			
	B2	WO 01/51604 A2	EXELIXIS, INC.	07/19/01			
	B3	WO 02/070744 A2	GALAPAGOS GENOMICS B.V.	09/12/02			
	B4	WO 03/016839 A2	XENOGEN CORPORATION	02/27/03			

FOREIGN PATENT DOCUMENTS					
Exam Initials	Cite No.	Foreign Patent Document Office Number	Name of Patentee(s) or Applicant(s)	Date of Publication	Translation Yes No

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.			
	C1	Abremski et al., "Bacteriophage P1 site-specific recombination", <i>J. Biol. Chem.</i> , 259(3):1509-1514 (1984)			
	C2	Abremski et al., "Studies on the properties of P1 site-specific recombination: evidence for topologically unlinked products following recombination", <i>Cell</i> , 32:1301-1311 (1983)			
	C3	Amin et al., "Synaptic intermediates promoted by the FLP recombinase", <i>J. Mol. Biol.</i> , 214:55-72 (1990)			
	C4	Bradley et al., "Embryo-derived stem cells: A tool for elucidating the developmental genetics of the mouse", <i>Curr. Topics Devel. Biol.</i> , 20:357-371 (1986)			
	C5	Bradley et al., "Formation of germ-line chimaeras from embryo-derived teratocarcinoma cell lines", <i>Nature</i> 309:255-258 (1984)			
	C6	Bradley, A.J., "Teratocarcinomas and Embryonic Stem Cells, a Practical Approach", E.J. Robertson, Eds., IRL Press, Washington, DC, pp. 113-152 (1987)			
	C7	Capecchi, M.R., "Altering the genome by homologous recombination", <i>Science</i> , 244:1288-1292 (1989)			
	C8	Capecchi, M.R., "The new mouse genetics: altering the genome by gene targeting", <i>Trends Genet.</i> , 5:70-76 (1989)			
	C9	Carrell et al., "A Novel Procedure for the Synthesis of Libraries Containing Small Organic Molecules", <i>Angew. Chem. Int. Ed. Engl.</i> , 33:2059-2060 (1994)			
	C10	Carrell et al., "A Solution-Phase Screening Procedure for the Isolation of Active Compounds from a Library of molecules", <i>Angew. Chem. Int. Ed. Engl.</i> , 33:2061-2064 (1994)			
	C11	Cho et al., "An unnatural biopolymer", <i>Science</i> , 261:1303-1305 (1993)			
	C12	Chomczynski et al., "Single-step method of RNA isolation by acid guanidinium thiocyanate-phenol-chloroform extraction" <i>Anal. Biochem.</i> , 162:156-159 (1987)			
	C13	Craig, N.L., "The mechanism of conservative site-specific recombination", <i>Ann. Rev. Genet.</i> , 22:77-105 (1988)			
	C14	Clegg et al., "Use of site-specific recombination to regenerate selectable markers", <i>Mol. Gen. Genet.</i> , 219:320-323 (1989)			
	C15	Cull et al., "Screening for receptor ligands using large libraries of peptides linked to the C terminus of the <i>lac</i> repressor", <i>Proc. Nat'l. Acad. Sci. U.S.A.</i> , 89:1865-1869 (1992)			
	C16	Cwiria et al., "Peptides on phage: A vast library of peptides for identifying ligands", <i>Proc. Nat'l. Acad. Sci. U.S.A.</i> , 87:6378-6382 (1990)			
	C17	de Villartay, et al., "Deletion of the human T-cell receptor δ -gene by a site-specific recombinations", <i>Nature</i> , 335:170-174 (1988)			
	C18	Devlin et al., "Random peptide libraries: a source of specific protein binding molecules", <i>Science</i> , 249:404-406 (1990)			
	C19	DeWitt et al., "Diversomers": An approach to nonpeptide, nonoligomeric chemical diversity", <i>Proc. Nat'l. Acad. Sci. U.S.A.</i> , 90:6909-6913 (1993)			
	C20	Dorin et al., "Successful targeting of the mouse cystic fibrosis transmembrane conductance regulator gene in embryonic stem cells", <i>Transgenic Res.</i> , 1:101-105 (1992)			
	C21	Echols, "Nucleoprotein Structures Initiating DNA Replication, Transcription, and Site-specific Recombination", <i>J. Biol. Chem.</i> , 265:14697-14700 (1990)			
	C22	Erb et al., "Recursive deconvolution of combinatorial chemical libraries", <i>Proc. Nat'l. Acad. Sci. U.S.A.</i> , 91:11422-11426 (1994)			
	C23	Evans et al., "Establishment in culture of pluripotential cells from mouse embryos", <i>Nature</i> , 292:154-156 (1981)			
	C24	Felici, F., "Selection of antibody ligands from a large library of oligopeptides expressed on a multivalent exposition vector", <i>J. Mol. Biol.</i> , 222:301-310 (1991)			

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
	C25	Flanagan et al., "Analysis of inhibitors of the site-specific recombination reaction mediated by Tn3 resolvase", <i>J. Mol. Biol.</i> , 206:295-304 (1989)
	C26	Fodor et al., "Multiplexed biochemical assays with biological chips", <i>Nature</i> , 364:555-556 (1993)
	C27	Furth et al., "Temporal control of gene expression in transgenic mice by a tetracycline-responsive promoter", <i>Proc. Nat'l. Acad. Sci. U.S.A.</i> , 91:9302-9306 (1994)
	C28	Gallop et al., "Applications of combinatorial technologies to drug discovery. 1. Background and peptide combinatorial libraries", <i>J. Med. Chem.</i> , 37(9):1233-1251 (1994)
	C29	GenBank Accession No. AF134214, May 1, 2000
	C30	GenBank Accession No. AF134215, May 1, 2000
	C31	GenBank Accession No. AF516106, June 5, 2002
	C32	GenBank Accession No. M13643, January 14, 1995
	C33	GenBank Accession No. NM_000791, March 29, 2009
	C34	GenBank Accession No. NM_003258, April 18, 2009
	C35	GenBank Accession No. NM_010049, October 22, 2008
	C36	GenBank Accession No. X66868, October 6, 1992
	C37	GenBank Accession No. X82032, December 5, 1995
	C38	Glasgow et al., "DNA-binding Properties of the Hin Recombinase", <i>J. Biol. Chem.</i> , 264:10072-10082 (1989)
	C39	Golic et al., "The FLP recombinase of yeast catalyzes site-specific recombination in the drosophila genome", <i>Cell</i> , 59:499-509 (1989)
	C40	Gordon, J.W., "Transgenic animals", in <i>Intrl. Rev. Cytol. – A Survey of Cell Biol.</i> , 115:171-229 (1989)
	C41	Gossler et al., "Transgenesis by means of blastocyst-derived embryonic stem cell lines", <i>Proc. Nat'l. Acad. Sci. U.S.A.</i> , 83:9065-9069 (1986)
	C42	Haffter et al., "Enhancer-independent mutants of the Cin recombinase have a relaxed topological specificity", <i>EMBO J.</i> , 7:3991-3996 (1988)
	C43	Hoess et al., "Interaction of the bacteriophage P1 recombinase Cre with the recombining site <i>loxP</i> ", <i>Proc. Nat'l. Acad. Sci. U.S.A.</i> , 81:1026-1029 (1984)
	C44	Houghten, "The Use of Synthetic Peptide Combinatorial Libraries for the Identification of Bioactive Peptides", <i>Biotech.</i> , 13:412-421 (1992)
	C45	Hsiao et al., "Multiple DNA elements are required for the growth regulation of the mouse E2F1 promoter", <i>Genes Dev.</i> , 8(13):1526-1537 (1994)
	C46	Hubner et al., "Bent +DNA is needed for recombinational enhancer activity in the site-specific recombination system of bacteriophage P1", <i>J. Mol. Biol.</i> , 205:493-500 (1989)
	C47	Hunger-Bertling et al., "Short DNA fragment induce site specific recombination in mammalian cells", <i>Mol. Cell. Biochem.</i> , 92:107-116 (1990)
	C48	Irwin et al., "Role for the p53 homologue p73 in E2F-1-induced apoptosis", <i>Nature</i> , 407:645-648 (2000)
	C49	Johnson et al., "Antoregulatory control of E2F1 expression in response to positive and negative regulators of cell cycle progression" <i>Genes Dev.</i> , 8(13):1514-1525 (1994)
	C50	Johnson et al., "Selectively replicating adenoviruses targeting deregulated E2F activity are potent, systemic antitumor agents", <i>Cancer Cell</i> , 1(4):325-337 (2002)
	C51	Keown et al., "Methods for introducing DNA into Mammalian Cells", <i>Meth. Enzymol.</i> , 185:527-537 (1990)
	C52	Koller et al., "Toward an animal model of cystic fibrosis: Targeted interruption of exon 10 of the cystic fibrosis transmembrane regulator gene in embryonic stem cells", <i>Proc. Nat'l. Acad. Sci. U.S.A.</i> , 88:10730-10734 (1991)
	C53	Krebber et al., "Inclusion of an upstream transcriptional terminator in phage display vectors abolishes background expression of toxic fusion with coat protein g3p", <i>Gene</i> , 178:71-74 (1996)

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
	C54	Lam et al., "A new type of synthetic peptide library for identifying ligand-binding activity", <i>Nature</i> , 354:82-84 (1991)
	C55	Lam, K.S., "Application of combinatorial library methods in cancer research and drug discovery", <i>Anti-Cancer Drug Des.</i> , 12:145-167 (1997)
	C56	Lavitrano et al., "Sperm cells as vectors for introducing foreign DNA into eggs: genetic transformation of mice", <i>Cell</i> , 57:717-723 (1989)
	C57	Lo, "Transformation by Iontopheretic microinjection of DNA: Multiple Integrations without Tandem Insertions", <i>Mol. Cell. Biol.</i> , 3:1803-1814 (1983)
	C58	Lois et al., "Germline Transmission and Tissue-Specific Expression of Transgenes Delivered by Lentiviral Vectors", <i>Science</i> , 295(5556):868-872 (2002)
	C59	Malynn et al., "The scid defect affects the final step of the immunoglobulin VDJ recombinase mechanism", <i>Cell</i> , 54:453-460 (1988)
	C60	Mansour et al., "Disruption of the proto-oncogene int-2 in mouse embryo-derived stem cells: a general strategy for targeting mutations to non-selectable genes", <i>Nature</i> , 336:348-352 (1988)
	C61	Matsuzaki et al., "Chromosome Engineering in <i>Saccharomyces cerevisiae</i> by Using a Site-Specific Recombination System of a Yeast Plasmid", <i>J. Bacteriol.</i> , 172:610-618 (1990)
	C62	Mercier et al., "Structural and Functional Characterization of <i>tnpI</i> , a Recombinase Locus in Tn21 and Related β -Lactamase Transposons", <i>J. Bacteriol.</i> , 172:3745-3757 (1990)
	C63	Neuman et al., "Author's Correction: Transcription of the E2F-1 Gene Is Rendered Cell Cycle Dependent by E2F DNA-Binding Sites within Its Promoter" <i>Mol. Cell. Biol.</i> , 15(8):4660 (1995)
	C64	Neuman et al., "Transcription of the E2F-1 Gene Is Rendered Cell Cycle Dependent by E2F DNA-Binding Sites within Its Promoter", <i>Mol. Cell. Biol.</i> , 14(10):6607-6615 (1994)
	C65	No et al., "Ecdysone-inducible gene expression in mammalian cells and transgenic mice", <i>Proc. Nat'l. Acad. Sci. U.S.A.</i> , 93:3346-3351 (1996)
	C66	Parr et al., "Tumor-selective transgene expression in vivo mediated by an E2F-responsive adenoviral vector" <i>Nat. Med.</i> , 3(10):1145-1149 (1997)
	C67	Parsons et al., "Functional Analysis of Arg-308 Mutants of Flp Recombinase", <i>J. Biol. Chem.</i> , 265:4527-4533 (1990)
	C68	Potrykus et al., "Direct gene transfer to cells of a graminaceous monocot", <i>Mol. Gen. Genet.</i> , 199:183-188 (1985)
	C69	Potter et al., "Enhancer-dependent expression of human κ immunoglobulin genes introduced into mouse pre-B lymphocytes by electroporation", <i>Proc. Nat'l. Acad. Sci. U.S.A.</i> , 81:7161-7165 (1984)
	C70	Poyart-Salmeron et al., "Molecular characterization of two proteins involved in the excision of the conjugative transposon Tn1545: homologies with other site-specific recombinases", <i>EMBO J.</i> , 8(8):2425-2433 (1989)
	C71	Robertson et al., "Germ-line transmission of genes introduced into cultured pluripotent cells by retroviral", <i>Nature</i> , 323:445-448 (1986)
	C72	Sato et al., "The <i>cisA</i> Cistron of <i>Bacillus subtilis</i> Sporulation Gene <i>spoVC</i> Encodes a Protein Homologous to a Site-Specific Recombinase", <i>J. Bacteriol.</i> , 172:1092-1098 (1990)
	C73	Schwartz et al., "FLP recombinase of the 2 μ m circle plasmid of <i>Saccharomyces cerevisiae</i> bends its DNA target", <i>J. Mol. Biol.</i> , 205:647-658 (1989)
	C74	Scott et al., "Searching for peptide ligands with an epitope library", <i>Science</i> , 249:386-390 (1990)
	C75	Sellers et al., "Role of the retinoblastoma protein in the pathogenesis of human cancer", <i>J. Clin. Oncol.</i> , 15:3301-3312 (1997)
	C76	Stark et al., "Site-specific recombination by Tn3 resolvase: topological changes in the forward and reverse reactions", <i>Cell</i> , 58:779-790 (1989)
	C77	Sternberg, et al., "Site-specific Recombination and Its Role in the Life Cycle of Bacteriophage P1", <i>Cold Spring Harbor Symp. Quant. Biol.</i> , 45:297-309 (1981)
	C78	Thillet et al., "Site-directed Mutagenesis of Mouse Dihydrofolate Reductase", <i>J. Biol. Chem.</i> , 263:12500-12508 (1988)
	C79	Thomas et al., "Site-directed mutagenesis by gene targeting in mouse embryo-derived stem cells", <i>Cell</i> , 51:503-512

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
		(1987)
	C80	Thompson et al., "Germ line transmission and expression of a corrected HPRT gene produced by gene targeting in embryonic stem cells", <i>Cell</i> , 56:313-321 (1989)
	C81	Van der Putten et al., "Efficient insertion of genes into the mouse germ line via retroviral vectors", <i>Proc. Nat'l. Acad. Sci. U.S.A.</i> , 82:6148-6152 (1985)
	C82	Vassaux et al., "Insulation of a conditionally expressed transgene in an adenoviral vector", <i>Gene Ther.</i> , 6(6):1192-1197 (1999)
	C83	Veis et al., "Ble-2-deficient mice demonstrate fulminant lymphoid apoptosis, polycystic kidneys, and hypopigmented hair", <i>Cell</i> , 75:229-240 (1993)
	C84	Weisberg et al., in: Lambda II, Hendrix et al., Eds., Cold Spring Harbor Press, Cold Spring Harbor, NY, "Site-specific recombination in phage lambda", pgs. 211-250 (1983)
	C85	Zuckermann et al., "Discovery of nanomolar ligands for 7-Transmembrane G-protein-coupled receptors from a diverse N-(substituted)glycine peptoid library", <i>J. Med. Chem.</i> , 37:2678-2685 (1994)

*** By the waiver of 37 CFR 1.98(a)(2)(ii) copies of the U.S. Patents A1-A18 and U.S. Published Application A19 are not submitted.**

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.